

Remarks

Claims 1-17 are pending in the application. Claim 12 has been canceled above without prejudice, as have claims 13-15 and 17, which were drawn to a non-elected invention. Claims 1, 6 and 16 are amended above to further characterize the oil profile of the claimed invention, support for which is found at, for example, Table 2 on page 9 of the specification. In addition, the specification has been amended along with claims 4, 5, 10, and 11 to specify the accession numbers of deposited seed. A deposit is currently being arranged for seed of LS288, and the specification and claims will be amended accordingly once Applicant receives a deposit receipt. Finally, claim 16 has also been amended to include the word "and" at the suggestion of the Examiner, for which Applicant hereby expresses his gratitude. Upon entry of this amendment, claims 1-11 and 16 will be pending in the application.

In response to the §112, first paragraph of the claims set forth at pages 2-4 of the Office Action, Applicant notes that seeds of strains LS1498 and LS0417 have been deposited under the Budapest Treaty and those strains will irrevocably and without restriction or condition be released to the public upon issuance of a patent. A deposit of seeds is currently in process for strain LS288. Reconsideration in view of the foregoing is respectfully requested.

Next, claims 1-3, 6-9, 12, and 16 stand rejected as not enabled under §112, first paragraph as set forth at pages 4-6 of the Office Action. Applicant respectfully requests reconsideration of this rejection in view of the above amendments to the claims which have further specified the fatty acid profile of the claimed invention. The Examiner correctly notes that the source population from which the subject invention was derived was the high oleic population "Holeisyn." Applicant has shown the art that by using mutation breeding from high oleic lines, it is possible to obtain lines which retain the high oleic acid profile of the parent while yielding a reduced level of saturates. The claims as amended reflect this desirable profile. It would be unreasonable to assert that the "Holeisyn" line is the only line capable of being manipulated through mutation breeding to yield subsequent lines having the claimed fatty acid profile. In fact, those skilled in the art recognize that in cases of mutation breeding, a large number of attempts are made, followed by appropriate screening for the desired outcome. The skilled artisan knows going in that screening will be required and thus the experimentation required is not undue, though it may be somewhat tedious. Reconsideration is respectfully requested.

Next, Applicant requests reconsideration of the §112, second paragraph rejection of claims 4-5 and 10-11 set forth at pages 6-7 of the Office Action in view of the above amendments to those claims.

Applicant respectfully traverses the §112, second paragraph rejection of claims 1-5 set forth at page 7 of the Office Action. In support of this traversal, Applicant notes that it is very clear where the metes and bounds of the rejected claims lie. The fatty acid profile has been specified. The specification teaches how to determine fatty acid composition of seeds. Accordingly, anyone is able to determine whether a particular assemblage of seeds has a mean fatty acid profile falling within the explicit limitations of the claim. Reconsideration is requested.

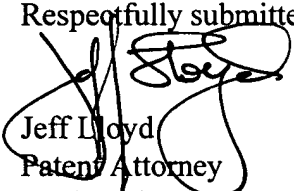
Finally, the §112, second paragraph of claim 12 set forth at page 8 of the Office Action has been rendered moot by Applicant's cancellation, without prejudice, of claim 12.

In view of the foregoing, Applicant believes that the claims are in condition for allowance, and respectfully requests reconsideration.

The Commissioner is hereby authorized to charge to Deposit Account 19-0065 any fees under 37 CFR 1.16 or 1.17 as required by this paper.

Applicant invites the Examiner to call the undersigned if clarification is needed on any of this amendment, or if the Examiner believes that a telephone interview would expedite prosecution of the subject application to completion.

Respectfully submitted,



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Attachment: Petition and Fee for Extension of Time

Marked-up Paragraphs

Seeds of the lines disclosed herein are deposited with the American Type Culture Collection, 12301 Parklawn Drive, Rockville, MD 20852 USA, in accord with the provisions of the Budapest Treaty. Cultures were assigned the following accession numbers by the repository: LS1498, ATCC No. [ ] PTA-1396 (deposited February 22, 2001); LS288, ATCC No. [ ]; LS0417, ATCC No. [ ] PTA-1397 (deposited February 22, 2000).

Marked-Up Claims

1. (amended) An assemblage of corn seeds having a mean saturate content of less than about 7.0%, a mean oleic acid content of at least 64.9%, and a mean linoleic acid content of 27.4% or less, by weight relative to the total fatty acid content of said seed.

4. (amended) The assemblage of corn seeds according to claim 1, said seeds being obtained from a plant or plants belonging to a corn line selected from the group consisting of LS0417 (ATCC Accession No. PTA-1397), LS1498 (ATCC Accession No. PTA-1396), LS288, or sublines produced therefrom.

5. (amended) The assemblage of corn seeds according to claim 4, wherein said seeds are obtained from a plant or plants belonging to the LS1498 (ATCC Accession No. PTA-1396) corn line, or sublines produced therefrom.

6. (amended) A corn plant that produces seeds having a mean saturate content of less than about 7.0%, a mean oleic acid content of at least 64.9%, and a mean linoleic acid content of 27.4% or less, by weight relative to the total fatty acid content of said seeds.

10. (amended) The corn plant according to claim 6, wherein said corn plant belongs to a corn line selected from the group consisting of LS1498 (ATCC Accession No. PTA-1396), LS288, and LS0417 (ATCC Accession No. PTA-1397), or sublines produced therefrom.

11. (amended) The corn plant according to claim 10, wherein said corn plant belongs to the LS1498 (ATCC Accession No. PTA-1396) corn line.

16. (amended) A method for producing low saturate corn material, comprising the steps of:

(a) obtaining a plurality of corn seeds having a mean saturate content of less than about 7.0%, a mean oleic acid content of at least 64.9%, and a mean linoleic acid content of 27.4% or less;

(b) growing out said plurality of corn seeds to obtain a population of corn plants;

(c) intermating plants comprising said population to produce first seeds;

(d) subjecting said first seeds to selection based on saturate content, such that a predetermined saturate percentage of said first seeds is retained and plants grown from said predetermined percentage of seeds are intermated to produce second seeds; and

(e) with said second seeds obtained, repeating steps (b), (c), and (d) at least once, whereby plants producing seeds that have a mean saturate content of less than about 7.0% by weight are obtained.